

Abstract of the Disclosure

5 Optical link related wavekey information and other vendor specific
information is distributed in a WDM network using an extension of the standard OSPF
routing protocol. The extension makes use of a vendor attribute Link State
Advertisement (LSA) which is a new type of opaque LSA. The vendor attribute LSAs
include a Vendatt Link State Identifier (ID) field in the LSA header, and a Vendatt
10 Type/Length/Value (TLV) structure. The Vendatt TLV includes a Vendatt-type field
identifying the TLV as a Vendatt TLV, and an enterprise code field identifying the
vendor whose equipment (node or network element) generates vendor attribute LSAs or
is able to receive vendor attribute LSAs by the identified vendor. Vendor attribute LSAs
of a specific vendor are designed to be ignored by nodes or network elements of other
15 vendors.